ABSTRACT

A reaction layer 12 which reacts with a substance to be measured in a sample solution is provided on a working electrode 1, a counter electrode 2, and a third electrode 3 which are provided on an insulating substrate 7 so as to bridge the respective electrodes, the content of the substance to be measured is measured from a current value which is produced by a reaction between the substance to be measured and the reaction layer, which reaction is obtained between the working electrode 1 and the counter electrode 2, and the types of sample solution is judged by a difference between oxidation current values or between oxidation current waveforms, which are obtained between the third electrode 3 and the counter electrode 2 or between the third electrode 3 and the working electrode 1, thereby automatically judging the types of sample solution without artificial preoperation.